

- 428), canned and preserved food processing (40 CFR Part 408), and meat product processing (40 CFR Part 432).
8. The United States Environmental Protection Agency (USEPA) and the Regional Board have classified Burbank WRP as a major discharger. It has a Threat to Water Quality and Complexity Rating of 1-A, pursuant to Section 2200, Title 23, CCR.
 9. Pursuant to 40 CFR, Part 403, the Burbank WRP developed, and has been implementing, an industrial wastewater Pretreatment Program, which has been approved by USEPA and the Regional Board.
 10. The treatment at the Burbank WRP currently consists of barscreen segregation of large solids for maceration and return to the treatment stream, primary sedimentation, nitrification/denitrification (NDN) activated sludge biological treatment, secondary sedimentation with coagulation, single media sand filtration, and chlorination with sodium hypochlorite and dechlorination with sodium bisulfite. No facilities are provided for solids processing at the Burbank WRP. Sewage solids separated from the wastewater are returned to the trunk sewer for conveyance to NOS for treatment and disposal. Figure 2-A is a schematic of the Burbank WRP wastewater flow.
 11. In September 1991, a draft Environmental Impact Report (EIR) was prepared for the City, by James M. Montgomery Consulting Engineers, Inc., to upgrade the plant and to expand its design capacity to 15 MGD. Although the EIR was finalized in January 1992, all of the upgrades have not been completed. The Burbank WRP has undergone several upgrades within the last decade and is still undergoing changes. The major plant upgrade, which was completed in 1999, included the addition of a third chlorine contact chamber and replacement of the old tertiary-filters with new deep-bed effluent filters. Following the 1999 upgrade, the City retrofitted its aeration basins for NDN treatment, in order to achieve compliance with the Basin Plan's ammonia objectives. Start-up of the NDN biological nutrient removal facilities began on March 18, 2003. Testing and modification operations of the NDN facilities continued for ninety days. In October 2003, the City began a nine-month construction project to provide new disinfection facilities (allowing the Burbank WRP to convert from gaseous chlorine disinfection to sodium hypochlorite disinfection), and new dechlorination facilities. Dechlorination facilities were formerly located at the Burbank SPP only, not at the Burbank WRP. The addition of a new flow equalization basin, which is currently in the design phase, will allow the City to capture peak daytime flow, increase the average dry weather influent flows to 12.5 MGD, increase recycled water availability, and improve operation of the biological system. Figure 2-B depicts the future schematic of the wastewater flow at the Burbank WRP, after the flow equalization basin is constructed.
 12. **Water Recycling Facility.** In 2005, the Discharger recycled 1252.74 acre-feet (409.8 million gallons) of treated effluent from the Burbank WRP [50.3% (630.4 acre-feet) for irrigation and 49.7% (622.34 acre-feet) for cooling water supply] and discharged an average of 5.8 MGD from the Burbank WRP to Burbank Western Channel. The production, distribution and reuse of recycled water for direct, non-potable applications

are presently regulated under Water Reclamation Requirements (WRR) Order No. 91-101, adopted by this Board on September 9, 1991, pursuant to California Water Code section 13523.

BURBANK STEAM POWER PLANT:

13. The City of Burbank Water and Power Department owns and operates the Burbank SPP located at 164 West Magnolia Boulevard, Burbank, California, on a 23-acre site. The site is bound by Magnolia Boulevard on the north, Olive Avenue on the south, Lake Avenue on the west, and Interstate Highway 5 on the east. The City of Burbank upgraded the Burbank SPP, as part of the Magnolia Power Project (MPP), by replacing the older power generating units with more energy-efficient units and switching to a zero liquid discharge (ZLD) process. On June 14, 2005, discharge of process wastewater from the Burbank SPP, through Discharge Serial No. 001, into the Burbank Western Channel ceased. Under the ZLD alternative, cooling tower blowdown and related wastewater from the new Magnolia Unit are completely evaporated using a crystallizer, filter press, and sludge dryer. Dry solids are transported off-site to a landfill. Thus, the need to discharge process wastewater to the Burbank Western Channel has been eliminated. Process wastewater from the Burbank SPP is now discharged to the sanitary sewer for treatment.
14. Recycled water is still supplied by the City of Burbank Public Works Department, from the Burbank WRP, to the Burbank SPP for industrial use as a source of cooling tower makeup water, demineralizer water, and boiler feed water. This reuse of recycled water is covered under WRR Order No. 91-101. In instances of low recycled water supply, the Burbank SPP uses potable water supplied by Metropolitan Water District and/or treated groundwater from wells owned by the City, as the make-up water in the cooling towers.
15. **Storm Water Management.** The City currently treats small quantities of storm water which falls on top of the uncovered aeration basins and other treatment units at the Burbank WRP. The City has filed a Notice of Intent to comply with State Board's General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities; has developed a Storm Water Pollution Prevention Plan (SWPPP) for storm water that does not enter the treatment system; and, has retained coverage under the General Industrial Storm Water permit. Stormwater runoff from the Burbank SPP, which is not contained or treated, would still be discharged to the Burbank Western Channel.

The industrial stormwater discharge from the Burbank SPP is not regulated under this individual NPDES permit, but is instead regulated under the Statewide General Stormwater Permit for Industrial Discharges.

DISCHARGE OUTFALL AND RECEIVING WATER DESCRIPTION

16. The Burbank WRP discharges tertiary treated wastewater to the Burbank Western Channel, tributary to the Los Angeles River, waters of the United States, above the estuary, at the following discharge point:

Discharge Serial No. 002: Discharge to the Burbank Western Channel near Burbank Boulevard (approximate coordinates: Latitude 34° 10' 58", Longitude 118° 18' 58"). Discharge to 002 usually occurs when gravity line capacity to the Burbank Steam Power Plant is exceeded.

As mentioned in a previous finding, the Burbank SPP no longer discharges process wastewater into the Burbank Western Channel, through Discharge Serial No. 001: [former coordinates: Latitude 34° 10' 42", Longitude 118° 18' 44"].

During dry weather (May 1 – October 31), the primary sources of water flow in the receiving waters, downstream of the discharge points, are the Burbank WRP effluent and other NPDES-permitted discharges, including urban runoff conveyed through the municipal separate storm sewer systems (MS4). Storm water and dry weather urban runoff from MS4 are regulated under a NPDES permit, *Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles* (LA Municipal Permit), NPDES Permit No. CAS004001.

17. The Los Angeles County Flood Control District channelized portions of the Los Angeles River to convey and control floodwater, and to prevent damage to homes located adjacent to the river. Although not its main purpose, the Los Angeles River conveys treated wastewater along with floodwater, and urban runoff. The Burbank Western Channel is concrete lined at the point of discharge through its confluence with the Los Angeles River, however, the Los Angeles River is unlined further downstream of its confluence with the Burbank Western Channel, in what is known as the Glendale Narrows. Groundwater recharge occurs incidentally, in these unlined areas of the Los Angeles River. The Basin Plan lists a designated groundwater recharge (GWR) beneficial use in this reach. It is believed that this reach of the Los Angeles river was not lined because of groundwater upwelling. At times when the groundwater table is high, groundwater rises and contributes flow to the Los Angeles River. It is believed that this reach of the Los Angeles river was not lined because of groundwater upwelling. Natural springs feed the river and support willows, sycamores, and cottonwood trees. South of the Glendale Narrows, the Los Angeles River is concrete-lined down to Willow Street, in Long Beach.

DISCHARGE QUALITY

18. In 2005, the Discharger's discharge monitoring reports showed the following:
 - treated wastewater average annual flow rate of 5.8 mgd.
 - average annual removal rate of 98.8% and 98.6%, of BOD and total suspended solids, respectively.
 - Median coliform values as <2 Most Probable Number (MPN)/ 100 ml in the treated wastewater.
19. Based on data submitted in the 2005 Annual report, Table 1 represents the

characteristics of the effluent discharged at Discharge No. 002 . (The "<" symbol indicates that the pollutant was not detected (ND) at that concentration level.) Attachment D contains an extensive statistical analyses of the effluent priority pollutants data from June 2003 to May 2006.

Table 1
Effluent Characteristics

Constituent	Unit	Average	Maximum	Minimum
Flow	mgd	5.8	8.2	4.1
pH	pH units	7.3	7.6	6.8
Temperature	°F	75	80	69
BOD ₅ 20 °C	mg/L	4	5	3
Total coliform	MPN/ 100 mL	2	2	<2
Suspended solids	mg/L	2	4	2

20. The Discharger's effluent demonstrated chronic toxicity during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause toxicity in the receiving water. However, the circumstances warranting a numeric chronic toxicity effluent limitation when there is reasonable potential were under review by the State Water Resources Control Board (State Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach Petitions]. On September 16, 2003, at a public hearing, the State Board adopted Order No. WQO 2003-0012, deferring the issue of numeric chronic toxicity effluent limitations until a subsequent phase of the SIP is adopted. In the mean time, the State Board replaced the numeric chronic toxicity limit with a narrative effluent limitation and a 1 TUc trigger, in the County Sanitation Districts of Los Angeles County's Long Beach and Los Coyotes WRP NPDES permits. This permit contains a similar chronic toxicity effluent limitation. This Order also contains a reopener to allow the Regional Board to modify the permit, if necessary, consistent with any new policy, law, or regulation.

APPLICABLE LAWS, PLANS, POLICIES AND REGULATIONS

21. **Federal Clean Water Act.** The Federal Clean Water Act (CWA) provides that no person may discharge pollutants from a point source into a water of the United States, except in conformance with a NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect and enhance water quality. CWA section 402 authorizes the USEPA or States with an approved NPDES program to issue NPDES permits. The State of California has an approved NPDES program.
22. **Thermal Plan.** On September 18, 1975, the State Water Resources Control Board (State Board) adopted a revised version of the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of*

California (Thermal Plan). The Thermal Plan contains temperature objectives for inland waters.

23. **Basin Plan.** The Regional Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) on June 13, 1994, and amended it by various Regional Board Resolutions. This updated and consolidated plan represents the Board's master water quality control planning document and regulations. The State Board and the State of California Office of Administrative Law (OAL) approved the revised Basin Plan on November 17, 1994, and February 23, 1995, respectively. On May 26, 2000, the USEPA approved the revised Basin Plan except for the implementation plan for potential municipal and domestic supply (P* MUN) designated surface waterbodies, which is not applicable to this discharge.

Ammonia Water Quality Objective (WQO). The 1994 Basin Plan contained water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board, with the adoption of Resolution No. 2002-011, Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (including enclosed bays, estuaries and wetlands) with Beneficial Use designations for protection of Aquatic Life. Resolution No. 2002-011 was approved by the State Board, the Office of Administrative Law, and USEPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively, and are now in effect. The final effluent limitations for ammonia prescribed in this Order are based on the TMDL for Nitrogen Compounds and related Effects in the Los Angeles River and apply at the end of pipe.

Chloride WQO. The 1994 Basin Plan contained water quality objectives for chloride in Table 3-8. However, the chloride objectives for some waterbodies were revised on January 27, 1997, by the Regional Board, with the adoption of Resolution No. 97-02, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters*. Resolution No. 97-02 was approved by the State Board, the Office of Administrative Law, and USEPA on October 23, 1997, January 9, 1998, and February 5, 1998, respectively, and are now in effect. The chloride WQO was revised from 150 mg/L to 190 mg/L, for the following segments of the Los Angeles River:

- a. Between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only), and
- b. Between Figueroa Street and the estuary (including Rio Hondo below Santa Ana Freeway only).

The final effluent limitations for chloride prescribed in this Order are based on the revised chloride WQOs and apply at the end of pipe.

The Basin Plan (i) designates beneficial uses for surface and groundwater, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the

designated (existing and potential) beneficial uses and conform to the State's antidegradation policy, and (iii) includes implementation provisions, programs, and policies to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The 1994 Basin Plan was prepared to be consistent with all State and Regional Board plans and policies adopted in 1994 and earlier. This Order implements the plans, policies, and provisions of the Board's Basin Plan.

24. ***Sources of Drinking Water Policy.*** On May 19, 1988, the State Board adopted Resolution No. 88-63, *Sources of Drinking Water (SODW) Policy*, which established a policy that all surface and ground waters, with limited exemptions, are suitable or potentially suitable for municipal and domestic supply. To be consistent with State Board's SODW policy, on March 27, 1989, the Regional Board adopted Resolution No. 89-03, *Incorporation of Sources of Drinking Water Policy into the Water Quality Control Plans (Basin Plans) – Santa Clara River Basin (4A)/ Los Angeles River Basin (4B)*.
25. ***Potential Municipal and Domestic Supply (P* MUN).*** Consistent with Regional Board Resolution No. 89-03 and State Board Resolution No. 88-63, in 1994 the Regional Board conditionally designated all inland surface waters in Table 2-1 of the 1994 Basin Plan as existing, intermittent, or potential for Municipal and Domestic Supply (MUN). However, the conditional designation in the 1994 Basin Plan included the following implementation provision: "no new effluent limitations will be placed in Waste Discharge Requirements as a result of these [potential MUN designations made pursuant to the SODW policy and the Regional Board's enabling resolution] until the Regional Board adopts [a special Basin Plan Amendment that incorporates a detailed review of the waters in the Region that should be exempted from the potential MUN designations arising from SODW policy and the Regional Board's enabling resolution]." On February 15, 2002, as a result of a legal challenge and federal court order, the USEPA clarified its partial approval (May 26, 2000) of the 1994 Basin Plan amendments and acknowledged that the conditional designations do not currently have a legal effect, do not reflect new water quality standards subject to USEPA review, and do not support new effluent limitations based on the conditional designations stemming from the SODW Policy until a subsequent review by the Regional Board finalizes the designations for these waters. This permit is designed to be consistent with the existing Basin Plan.
26. ***State Implementation Plan (SIP) and California Toxics Rule (CTR)*** - The State Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (also known as the State Implementation Plan or SIP) on March 2, 2000. The SIP was amended by Resolution No. 2000-30, on April 26, 2000, and the Office of Administrative Law approved the SIP on April 28, 2000. On this date, the SIP became effective with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP applies to discharges of toxic pollutants in the inland surface waters, enclosed bays and estuaries of California which are subject to regulation under the State's Porter-Cologne Water Quality

Control Act (Division 7 of the Water Code) and the Federal Clean Water Act (CWA). This policy also establishes the following:

- a. Implementation provisions for priority pollutant criteria promulgated by USEPA through the California Toxics Rule (CTR) and for priority pollutant objectives established by Regional Water Quality Control Boards in their water quality control plans (Basin Plans);
- b. Monitoring requirements for priority pollutants with insufficient data to determine reasonable potential;
- c. Monitoring requirements for 2, 3, 7, 8 – TCDD equivalents; and,
- d. Chronic toxicity control provisions.

The CTR became effective on May 18, 2000 (codified as 40 CFR, Part 131.38). The SIP (which implements CTR criteria) was revised by the State Board on February 24, 2005. The revised SIP became effective on May 31, 2005. Toxic pollutant limits are prescribed in this Order to implement the CTR, the SIP, and the Basin Plan.

In the CTR, USEPA promulgated criteria that protects the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. USEPA recognizes that adoption of a different risk factor is outside of the scope of the CTR. However, states have the discretion to adopt water quality criteria that result in a higher risk level, if it can demonstrate that the chosen risk level is adequately protective of the most highly exposed subpopulation, and has completed all necessary public participation. This demonstration has not happened in California. Further, the information that is available on highly exposed subpopulations in California supports the need to protect the general population at the 10^{-6} level. The Discharger may undertake a study, in accordance with the procedures set forth in Chapter 3 of USEPA's Water Quality Standards Handbook: Second Edition (EPA-823-B-005a, August 1994) to demonstrate that a different risk factor is more appropriate. Upon completion of the study, the State Board will review the results and determine if the risk factor needs to be changed. In the mean time, the State will continue using a 10^{-6} risk level, as it has done historically, to protect the population against carcinogenic pollutants.

27. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.
28. **Beneficial Uses.** The Basin Plan contains water quality objectives and beneficial uses

for Burbank Western Channel, the Los Angeles River, and its contiguous waters.

A. The beneficial uses of the receiving surface waters are:

Burbank Western Channel - Hydrologic Unit 405.21	
Intermittent:	non-contact water recreation, and
Potential:	Municipal and domestic water supply (MUN) ¹ , water contact recreation (REC-1) ² , warm freshwater habitat (WARM), and wildlife habitat (WILD).
Los Angeles River (upstream of Figueroa Street) - Hydrologic Unit 405.21	
Existing:	groundwater recharge (GWR), water contact recreation (REC-1) and non-contact recreation (REC-2), warm freshwater habitat (WARM), wildlife habitat (WILD), and wetland habitat (WET).
Potential:	MUN ¹ , and industrial process supply.
Los Angeles River (downstream of Figueroa Street) - Hydrologic Unit 405.15	
Existing:	groundwater recharge (GWR), water contact ² recreation (REC-1) and non-contact recreation (REC-2), and warm freshwater habitat (WARM).
Potential:	MUN ¹ , and industrial process supply (PROC).
Los Angeles River to Estuary - Hydrologic Unit 405.12	
Existing:	groundwater recharge (GWR), water contact ² recreation (REC-1) and non-contact water recreation (REC-2), warm freshwater habitat (WARM), marine habitat (MAR), wildlife habitat (WILD), and rare, threatened, or endangered species (RARE).
Potential:	MUN ¹ , industrial service supply (IND), industrial process supply (PROC), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and shellfish harvesting (SHELL).
Los Angeles River Estuary - Hydrologic Unit 405.12	
Existing:	industrial service supply (IND), navigation (NAV), water contact ² recreation (REC-1) and non-contact water recreation (REC-2), commercial and sport fishing (COMM), estuarine habitat (EST), marine habitat (MAR), wildlife habitat (WILD), rare, threatened, or endangered species (RERE), migration of aquatic organisms (MIGR), spawning, reproduction, and/or early development (SPWN), and wetland habitat (WET).
Potential:	shellfish harvesting (SHELL).

¹ The potential MUN beneficial use for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

² Access is prohibited by Los Angeles County DPW.

B. The beneficial uses of the receiving ground waters are:

San Fernando Basin (East of Highway 405 overall) - DWR Basin No. 4-12	
Existing:	municipal and domestic supply (MUN), industrial service supply (IND); industrial process supply (PROC); and, agricultural supply (AGR).
Los Angeles Coastal Plain (Central Basin) – DWR Basin No. 4-11	
Existing:	municipal and domestic supply (MUN), industrial service supply (IND); industrial process supply (PROC); and, agricultural supply (AGR).
Los Angeles Coastal Plain (West Coast Basin) – DWR Basin No. 4-11	
Existing:	municipal and domestic supply (MUN), industrial service supply (IND); industrial process supply (PROC); and, agricultural supply (AGR).

29. ***Title 22 of the California Code of Regulations.*** The California Department of Health Services established primary and secondary maximum contaminant levels (MCLs) for inorganic, organic, and radioactive contaminants in drinking water. These MCLs are codified in Title 22, California Code of Regulations (Title 22). The Basin Plan (Chapter 3) incorporates Title 22 primary MCLs by reference. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect. Title 22 primary MCLs have been used as bases for effluent limitations in WDRs and NPDES permits to protect the groundwater recharge beneficial use when that receiving groundwater is designated as MUN. Also, the Basin Plan specifies that "Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses." Therefore the secondary MCL's, which are limits based on aesthetic, organoleptic standards, are also incorporated into this permit to protect groundwater quality.

MCL Development Process - Health and Safety Code §116365(a) requires the Department of Health Services (DHS), while placing primary emphasis on the protection of public health, to establish a contaminant's maximum contaminant level (MCL) at a level as close as is technically and economically feasible to its public health goal (PHG). The PHG—established by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA)—is the contaminant's concentration in drinking water that does not pose any significant risk to health, derived from a human health risk assessment.

As part of the MCL process, DHS evaluates the technical and economic feasibility of regulating a chemical contaminant. Technical feasibility includes an evaluation of commercial laboratories' ability to analyze for and detect the chemical in drinking water, the costs of monitoring, and the costs of treatment required to remove it. Costs are required by law to be considered whenever MCLs are adopted.

Then, the proposed MCL moves through a formal regulatory process. DHS releases

proposed regulations for a 45-day public comment period. If any "Post-hearing" changes made in response to comments, DHS subsequently provides an additional 15-day public comment period. Once DHS completes its process, it submits the regulation package, including responses to public comments, to the Office of Administrative Law (OAL). OAL has 30 working days to review the regulation and approve or reject it. If approved by OAL, it is filed with the Secretary of State, becoming effective in 30 calendar days.

Groundwater Recharge. Sections of the Los Angeles River, downstream of the Burbank WRP discharge point, are designated as GWR. The depth of groundwater below the Burbank WRP is approximately 100 feet below ground surface. Surface water from the Los Angeles River enters the San Fernando Valley and the Central Los Angeles Coastal Plain Groundwater Basins. Since ground water from these Basins is used to provide drinking water to people, Title 22-based limits are needed to protect that drinking water supply. By limiting the contaminants in the Burbank WRP discharge, the amount of pollutants entering the surface waters and groundwater basins are correspondingly reduced. Once groundwater basins are contaminated, it may take years to clean up, depending on the pollutant. Compared to surface water pollution, investigations and remediation of groundwater are often more difficult, costly, and extremely slow. For these reasons Title 22-based limits will remain in the NPDES permit.

30. **Antidegradation Policy.** On October 28, 1968, the State Board adopted Resolution No. 68-16, *Maintaining High Quality Water*, which established an antidegradation policy for State and Regional Boards. The State Board has, in State Board Order No. 86-17 and an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully consistent with the federal antidegradation policy. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR, Section 131.12) require that all permitting actions be consistent with the federal antidegradation policy. Together, the State and Federal policies are designed to ensure that a water body will not be degraded resulting from the permitted discharge. The provisions of this Order are consistent with the antidegradation policies.
31. **Watershed Approach** - This Regional Board has been implementing a Watershed Management Approach (WMA), to address water quality protection in the Los Angeles Region, as detailed in the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science. Information about the Los Angeles River Watershed and other watersheds in the region can be obtained from the Regional Board's web site at <http://www.swrcb.ca.gov/rwqcb4/> and clicking on the word "Watersheds".

Pursuant to this Regional Board's watershed initiative framework, the Los Angeles River Watershed Management Area was the targeted watershed for fiscal year 1998-1999. However, the NPDES permit renewals were re-scheduled for the 2003-2004 fiscal year so that provisions of the CTR and SIP could be incorporated into the permits. However, delays in the renewal were caused by lengthy litigation.

REGULATORY BASIS FOR EFFLUENT LIMITS AND DISCHARGE REQUIREMENTS

32. ***Water Quality Objectives and Effluent Limits.*** Water Quality Objectives (WQOs) and effluent limitations in this permit are based on:

A. Applicable State Regulations/Policies/Guidances:

- a. The plans, policies and water quality standards (beneficial uses + objectives + antidegradation policy) contained in the 1994 *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*, as amended, including chemical constituent limitations established by incorporating the California Code of Regulations, Title 22, maximum contaminant levels designed to protect the existing drinking water use of the receiving groundwaters;
- b. California Toxics Rule (40 CFR 131.38);
- c. The State Board's "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" (the State Implementation Plan or SIP);
- d. Administrative Procedures Manual and Administrative Procedure Updates;
- e. Porter-Cologne Water Quality Act (Water Code § 13000 et seq).

B. Applicable Federal Regulations/Policies/Guidances

- a. Federal Clean Water Act;
- b. 40 CFR, Parts 122, 131, among others;
- c. Best professional judgment (pursuant to 40 CFR 122.44);
- d. USEPA Regions 9 & 10 Guidance for Implementing Whole Effluent Toxicity Programs Final May 31, 1996;
- e. USEPA Whole Effluent Toxicity (WET) Control Policy July 1994;
- f. Inspectors Guide for Evaluation of Municipal Wastewater Treatment Plants, April 1979 (EPA/430/9-79-010);
- g. Fate of Priority Pollutants in Publicly Owned Treatment Works Pilot Study October 1979 (EPA-440/1-79-300);
- h. *Technical Support Document for Water Quality Based Toxics Control*, March 1991 (EPA-505/2-90-001);

- i. *U.S. EPA NPDES Permit Writers' Manual*, December 1996 (EPA-833-B-96-003);
- j. USEPA National Recommended Water Quality Criteria: 2002, November 2002 (EPA-822-R-02-047); and,
- k. USEPA Drinking Water Standards, 40 CFR 141 and 142, Federal Register Vol.57, No. 138 (July 17, 1992).

Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR Part 122.44(d) specifies that water quality based effluent limits may be set based on USEPA criteria and supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

33. **Mass and Concentration Limits.** 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both.

Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, discourage the reduction in treatment efficiency during low-flow periods and require proper operation of the treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low-flow periods and still meet its mass-based limits. To account for this, this permit includes mass and concentration limits for some constituents; however, the mass-based limits are inappropriate during wet weather flows when plant flows may exceed design capacity. Therefore, during storm events when flows exceed design capacity, only concentration-based limits are applicable.

34. **Maximum Daily Effluent Limitations.** Pursuant to 40 CFR section 122.45(d)(2), for a POTW's continuous discharges, all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall, unless impracticable, be stated as average weekly and average monthly discharge limitations. It is impracticable to only include average weekly and average monthly effluent limitations for certain pollutants in the permit, because a single daily discharge of certain pollutants, in excess amounts, can cause violations of water quality objectives. The effects of certain pollutants on aquatic organisms are often rapid. For many pollutants, an average weekly or average monthly effluent limitation alone is not sufficiently protective of beneficial uses. As a result, maximum daily effluent limitations, as referenced in 40 CFR section 122.45(d)(1), are included in the permit for certain

constituents as discussed in the Fact Sheet accompanying this Order.

35. **Pretreatment.** Pursuant to 40 CFR Part 403, the City developed and has implemented an approved industrial wastewater pretreatment program. This Order requires implementation of the approved Pretreatment Program and modifications thereof.
36. **Sludge Disposal.** To implement CWA Section 405(d), on February 19, 1993, the USEPA promulgated 40 CFR, Part 503 to regulate the use and disposal of municipal sewage sludge. This regulation was amended on September 3, 1999. The regulation requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. It is the responsibility of the City to comply with said regulations that are enforceable by USEPA, because California has not been delegated the authority to implement this program.
37. **Storm Water.** CWA section 402(p), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, USEPA promulgated 40 CFR, Section 122.26 that established requirements for storm water discharges under a NPDES program. To facilitate compliance with federal regulations, on November 1991, the State Board issued a statewide general permit, General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities. This permit was amended in September 1992 and reissued on April 17, 1997 in State Board Order No. 97-03-DWQ to regulate storm water discharges associated with industrial activity.

General NPDES permit No. CAS000001 is applicable to storm water discharges from the Burbank WRP's premises. On March 19, 1992, the City filed a Notice of Intent to comply with the requirements of the general permit. The City developed and currently implements a Storm Water Pollution Prevention Plan (SWPPP), to comply with the State Board's Order No. 97-03-DWQ.
38. **Clean Water Act Effluent Limitations.** Numeric and narrative effluent limitations are established pursuant to Section 301 (Effluent Limitations), Section 302 (Water Quality-Related Effluent Limitations), Section 303 (Water Quality Standards and Implementation Plans), Section 304 (Information and Guidelines [Effluent]), Section 305 (Water Quality Inventory), Section 307 (Toxic and Pretreatment Effluent Standards), and Section 402 (NPDES) of the CWA. The CWA and amendments thereto are applicable to the discharges herein.
39. **Antibacksliding.** Antibacksliding provisions are contained in Sections 303(d)(4) and 402(o) of the CWA and in 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions. Section 402(o)(2) outlines six exceptions where effluent limitations may be relaxed.
40. **Applicable Water Quality Objectives.** 40 CFR section 122.44(d)(vi)(A) requires the establishment of effluent limitations to attain and maintain applicable narrative and numeric water quality criteria to protect the designated beneficial use.

The Basin Plan includes narrative and numeric Water Quality Objectives (WQOs). The CTR promulgates numeric aquatic life criteria for 24 toxic pollutants and numeric human health criteria for 92 toxic pollutants. A compliance schedule provision in the CTR and the SIP authorizes the State to issue schedules of compliance for new or revised NPDES permit limits based on the federal CTR criteria when certain conditions are met. CTR's Compliance Schedule provisions sunsetted on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from issuance or past May 17, 2010, whichever is sooner. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

41. **Types of Pollutants.** For CWA regulatory purposes, pollutants are grouped into three general categories under the NPDES program: conventional, toxic, and non-conventional. By definition, there are five conventional pollutants (listed in 40 CFR section 401.16): 5-day biochemical oxygen demand, total suspended solids, fecal coliform, pH, and oil and grease. Toxic or "priority" pollutants are those defined in Section 307(a)(1) of the CWA (and listed in 40 CFR section 401.15 and 40 CFR Part 423, Appendix A) and include metals and organic compounds. Non-conventional pollutants are those which do not fall under either of the two previously described categories and include such parameters as ammonia, phosphorous, chemical oxygen demand, whole effluent toxicity, etc.
42. **Technology-Based Limits for Municipal Facilities (POTWs).** Technology-based effluent limits require a minimum level of treatment for industrial/municipal point sources based on currently available treatment technologies while allowing the discharger to use any available control techniques to meet the effluent limits.

The 1972 CWA required POTWs to meet performance requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level--referred to as "secondary treatment"--that all POTWs were required to meet by July 1, 1977. More specifically, Section 301(b)(1)(B) of the CWA required that EPA develop secondary treatment standards for POTWs as defined in Section 304(d)(1). Based on this statutory requirement, EPA developed national secondary treatment regulations which are specified in 40 CFR Part 133. These technology-based regulations apply to all POTWs and identify the minimum level of effluent quality to be attained by secondary treatment in terms of five-day biochemical oxygen demand, total suspended solids, and pH.

43. **Water Quality Based Effluent Limits (WQBELs).** Water quality-based effluent limits are designed to protect the quality of the receiving water by ensuring that State water quality standards are met by discharges from an industrial/municipal point source. If, after technology-based effluent limits are applied, a point source discharge will cause, have the reasonable potential to cause, or contribute to an exceedance of an applicable water

quality criterion, then 40 CFR 122.44(d)(1) requires that the permit contain a WQBEL. Although the CWA establishes explicit technology-based requirements for POTWs, Congress did not exempt POTWs from additional regulation to protect water quality standards. As a result, POTWs are also subject to WQBELs.

44. ***Water Quality Based Effluent Limitations for Toxic Pollutants.*** Toxic substances are regulated in this permit by WQBELs derived from the 1994 Basin Plan, the CTR, and/or best professional judgment (BPJ) pursuant to 40 CFR section 122.44. If a discharge causes, has a reasonable potential to cause, or contribute to a receiving water excursion above a narrative or numeric objective within a State water quality standard, federal law and regulations, as specified in 40 CFR section 122.44(d)(1)(i), and in part, the SIP, require the establishment of WQBELs that will protect water quality. As documented in the fact sheet, pollutants exhibiting reasonable potential in the discharge, authorized in this Order, are identified in the Reasonable Potential Analysis (RPA) section and have final effluent limits. The discharger is required to gather the appropriate data and the Regional Board will determine if final effluent limits are needed. If final limits are needed, the permit will be reopened and limits will be included in the permit.
45. ***Stringency Requirements for Individual Pollutants.*** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD and TSS. Restrictions on BOD and TSS are specified in federal regulations as discussed in findings. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum federal technology-based requirements that are necessary to meet water quality standards.

This Order contains a pollutant restriction that is more stringent than applicable federal requirements and standards. Specifically, this Order includes an effluent limitation for bis(2-ethylhexyl)phthalate, that is more stringent than the applicable federal standards, but that is nonetheless necessary to meet numeric objectives or protect beneficial uses. The rationale for including this limitation is explained in Section X.2 of the corresponding Fact Sheet. In addition, the Regional Water Board has considered the factors in Water Code section 13241, as discussed in Section X.3 of the corresponding Fact Sheet.

The effluent limitations for arsenic, iron, and total trihalomethanes are based on the Title 22 MCLs, which are equal to USEPA's MCLs. Therefore, they are not more stringent than Federal Requirements.

Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant water quality-based effluent limitations were derived from the California Toxics Rule, the California Toxics Rule is the applicable standard pursuant to 40 C.F.R. 131.38. The

scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by USEPA on May 1, 2001. All designated beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the [Clean Water] Act" pursuant to 40 C.F.R. 131.21(c)(1). [The remaining water quality objectives (Basin Plan Amendments) implemented by this Order were subsequently approved by USEPA, and are applicable water quality standards pursuant to 40 C.F.R. 131.21(c)(2).] Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the Clean Water Act and the applicable water quality standards for purposes of the Clean Water Act.

46. On August 2005, the discharger, during a meeting with Regional Board staff, presented economic information indicating that the cost of complying with the ammonia nitrogen and nitrate plus nitrite as nitrogen effluent limitations is approximately \$16 million, for the nitrification denitrification (NDN) capital improvement project. However, the discharger has not submitted any other economic information regarding the cost of compliance with any other permit requirements.
47. ***Basis for Effluent Limits for 303(d) Listed Pollutants.*** For 303(d) listed pollutants, the Regional Board plans to develop and adopt total maximum daily loads (TMDLs) which will specify wasteload allocations (WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued, and where appropriate, reopened to include effluent limits consistent with the assumptions of the TMDL, based on applicable WLAs. In the absence of a TMDL, the permits will include water quality-based effluent limitations derived as provided in the CTR and SIP (if applicable). These effluent limits are based on criteria applied end-of-pipe due to no mixing zone or dilution credits allowed.
48. ***CWA 303(d) Listed Pollutants.*** On July 25, 2003, USEPA approved the State's most recent list of impaired waterbodies. The list (hereinafter referred to as the 303(d) list) was prepared in accordance with Section 303(d) of the Federal Clean Water Act to identify specific impaired waterbodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources.

The Burbank Western Channel, Los Angeles River, and its tributaries are on the 303(d) List. The following pollutants/stressors, from point and non-point sources, were identified as impacting the receiving waters:

Burbank Western Channel - Hydrologic Unit 405.21

- Algae, ammonia, cadmium, odors, scum/foam-unnatural, and trash.

Los Angeles River Reach 3 (Figueroa St. to Riverside Drive) Hydrologic Unit 405.21:

- Ammonia, nutrients (algae), odors, and scum/foam-unnatural.

Los Angeles River - Reach 2 (Carson to Figueroa Street) Hydrologic Unit 405.15:

- Ammonia, coliform, lead, nutrients (algae), odors, oil, scum, and trash;

Los Angeles River - Reach 1 (Estuary to Carson Street) Hydrologic Unit 405.12:

- Total aluminum, ammonia, dissolved cadmium, dissolved copper, coliform, lead, nutrients (algae), pH, scum/foam-unnatural, and dissolved zinc; and,

Los Angeles River Estuary (Queensway Bay):

- Chlordane (sediment), DDT (sediment), Lead (sediment), PCBs (sediment), and zinc (sediment).

The Regional Board revised the 303(d) list in 2002 and submitted the draft to the State Board for approval. The State Board had scheduled the draft 303(d) list, dated October 15, 2002, for approval at two of its meetings, however the item was postponed to hold additional workshops and to allow more time for the public to submit comments. The draft 303(d) list dated October 15, 2002, was revised on January 13, 2003, based on comments received. The draft 303(d) list, dated January 13, 2003, was adopted by the State Board at its February 4, 2003 meeting. The adopted 303(d) list was approved by USEPA on July 25, 2003.

49. **Relevant Total Maximum Daily Loads** - A Total Maximum Daily Load (TMDL) is a determination of the amount of a pollutant, from point, nonpoint, and natural background sources, including a margin of safety, which may be discharged to a water quality-limited water body. Section 303(d) of the CWA established the TMDL process. The statutory requirements are codified at 40 CFR, Part 130.7. TMDLs must be developed for the pollutants of concern which impact the water quality of water bodies on the 303(d) list. According to the TMDL schedule, under the amended consent decree, *Heal the Bay, Santa Monica Bay Keeper, et al. v. Browner, et al.* (March 23, 1999), the trash, nitrogen, and metals TMDLs for the Los Angeles River must be completed by March 2001, March 2003, and March 2004, respectively. The coliform TMDL for Los Angeles Harbor is scheduled for completion by March 2006.

- A. **Nitrogen Compounds TMDL.** On July 10, 2003, the Regional Board adopted Resolution No. 2003-009, *Amendment to the Basin Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River (Nitrogen Compounds TMDL)*. On November 19, 2003, the State Board approved the *Nitrogen Compounds TMDL*. However, on December 4, 2003, the Regional Board revised the Nitrogen Compound TMDL by adopting Resolution No. 2003-016, *Revision of Interim Effluent Limits for Ammonia in the Amendment to the Water Quality Control Plan for the Los Angeles Region to Include a TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River*. Resolution No. 2003-016 only revised the portion of the Nitrogen Compounds TMDL containing interim limits for total ammonia as nitrogen, for the Glendale and Tillman WRPs. All other portions of the TMDL remained unchanged.

The *Nitrogen Compounds TMDL* went into effect on March 23, 2004, when the Regional Board filed the Notice of Decision with the California Resources Agency.

- B. **Trash TMDL.** On January 25, 2001, the Regional Board adopted Resolution No. 01-006. However, on September 19, 2001, the Regional Board reconsidered Resolution No. 01-006 and adopted Resolution No. 2001-013, *Amendment to the Basin Plan for the Los Angeles Region to Incorporate a TMDL for Trash in the Los Angeles River (Trash TMDL)*, which supercedes Resolution No. 01-006. On February 19, 2002, the State Board adopted Resolution No. 02-038, approving the Regional Board's Trash TMDL.

The TMDL subsequently was approved by the State Water Quality Control Board on February 19, 2002 and by OAL on July 16, 2002. Since the State Board and OAL failed to approve the TMDL in time to meet the relevant federal consent decree, USEPA promulgated its own Trash TMDL. Upon approval of the Regional Board's TMDL by OAL, USEPA approved the Regional Board's LA River Trash TMDL on August 1, 2002, and deemed it to have superceeded the TMDL promulgated by USEPA.

The City of Los Angeles and the County of Los Angeles both filed petitions and complaints in the Los Angeles Superior Court challenging the LA River Trash TMDL. Subsequent negotiations led to a settlement agreement, which became effective on September 23, 2003. The Court of Appeal rejected the claims litigated by the cities, but found that the Water Board did not adequately complete the environmental checklist. The Court therefore affirmed a writ of mandate issued by the trial court, which orders the Water Board to set aside and not implement the TMDL until it has been brought into compliance with CEQA.

On June 6, the Regional Board set aside the TMDL and Resolution No. 01-013 which established it, pursuant to the writ of mandate. On June 28, 2006, a CEQA scoping meeting was conducted. Regional Board staff revised the CEQA checklist in response to comments received; prepared a Basin Plan Amendment to incorporate the LA River Trash TMDL; and, have scheduled the item for Board adoption at the October 2006 public hearing.

- C. **Metal TMDL.** On June 2, 2005, the Regional Board adopted Resolution No. R05-006, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals for the Los Angeles River and its Tributaries (LA River Metals TMDL)*. The LA River Metals TMDL contains waste load allocations for copper, lead, cadmium and zinc. Reasonable Potential Analysis (RPA) showed exceedances of water quality objectives in receiving water and the pollutants were detected in the effluent for these metals. Therefore, numeric limitations have been prescribed for these metals in this permit. On October 20, 2005, the State Board approved the *LA River Metals TMDL* by adopting Resolution No. 2005-0077. On December 9, 2005 and December 22, 2005, respectively, OAL and USEPA approved the *LA River*

Metals TMDL. It went into effect on January 11, 2006.

50. ***Mixing Zones, Water Effects Ratio (WER), and Dilution Credits.*** Mixing zones, dilution credits, WER, and attenuation factors are not authorized in this Order. Allowance of a mixing zone is in the Regional Board's discretion under Section 1.4.2 of the SIP and under the Basin Plan (Basin Plan Chapter 4, page 30). If the Discharger subsequently conducts appropriate mixing zone, WER, and dilution credit studies, the Regional Board can evaluate the propriety of granting a mixing zone or establishing dilution credits.

Translator study – In September 2004, the City of Burbank submitted, to the Regional Board, a draft workplan to conduct a Copper Translator Study, based on the 1996 USEPA Metals Translator Guidance. The intent of the City for developing a copper translator is to obtain a localized factor specifically for the Burbank Western Channel, rather than using the default factors in the CTR developed by USEPA. The approved translator would be used in accordance with SIP procedures to develop a revised CTR-based copper final effluent limit. On November 18, 2004, Regional Board staff provided preliminary comments requesting: the addition of a mixing zone study, clarification of sampling protocols, and clarification of the sampling schedule; suggesting that the workplan be revising, and requesting that it be resubmitted. In December 2004, the City subsequently submitted a revised draft workplan for Regional Board approval. On August 28, 2006, Regional Board staff provided comments on the December 2004 Workplan including a request for an additional sampling station, an updated sampling schedule, and clarification on details pertaining to the mixing zone study. The City submitted a revised workplan on October 19, 2006. Once the Workplan is approved, sampling for the Copper Translator Study along the Burbank Western Channel will begin.

Water Effects Ratio – The City of Burbank, in conjunction with the City of Los Angeles, is pursuing two separate water effect ratio (WER) studies, one for copper and another for ammonia. Larry Walker Associates (LWA) has been hired by the cities to conduct both the LA River Copper WER Study and the LA River Ammonia WER, according to their respective approved workplans. Technical Advisory Committees (TACs) have been assembled to provide independent review of the proposed WERs. A memorandum dated June 20, 2006, written by LWA, addressed to the Copper WER TAC, presents the results of sampling conducted and recommends different WERs for various reaches of the LA River. LWA was recommending a 5.7 WER for the Burbank Western Channel. Both WER studies have yet to be approved by the Regional Board. Although the WER studies may not be finalized before the NPDES permit goes to the Board for renewal, this permit contains a reopener which allows the modification of final effluent limits, if at the conclusion of necessary studies conducted by the Discharger, the Regional Board determines that dilution credits, attenuation factors, water effect ratios, or metal translators are warranted.

Dilution and Attenuation Factors - On July 16, 2003, the State Board adopted Order No. WQO 2003-0009, directing Regional Board staff to work with CSDLAC, once data was provided, to determine whether dilution and attenuation are appropriate factors to consider in developing effluent limits to protect the GWR beneficial use, in the Whittier Narrows

WRP NPDES permit. However, this does not apply to the Burbank WRP at this time, because the City of Burbank has not provided the necessary site-specific data or studies regarding the ground water basins in the San Fernando Valley and the Central Los Angeles Coastal Plain Groundwater Basin areas.

At this time, the Regional Board has concluded that mixing zones, WER, and dilution credits would be inappropriate to grant, in light of the following factors:

- A. The Burbank WRP discharge contributes the largest flow into the Burbank Western Wash, within the Los Angeles River watershed, in the vicinity of the discharge point where it overwhelms the receiving water, most of the year, providing very limited mixing and dilution;
 - B. Even in the absence of the Burbank WRP discharge, the receiving water primarily consists of nuisance flows and other effluents, limiting its assimilative capacity;
 - C. Several reaches of the Los Angeles River [including those subject to this Order] are 303(d) listed (i.e., impaired) for certain constituents;
 - D. Impaired waters do not have the capacity to assimilate pollutants of concern at concentrations greater than the applicable objective;
 - E. For the protection of the beneficial uses is listed on Finding 28;
 - F. Consistent with Antidegradation Policies;
 - G. Because a mixing zone study has not been conducted;
 - H. Because hydrologic models of the discharge and the receiving waters have not been conducted; and,
 - I. Because the final WER study reports have not been approved by the Board.
51. Specific effluent limitations for each constituent contained in this order were developed in accordance with the foregoing laws, regulations, plans, policies, and guidance. The specific methodology and example calculations are documented in the fact sheet prepared by Regional Board staff that accompanies this Order.

REASONABLE POTENTIAL ANALYSIS

52. As specified in 40 CFR, Part 122.44(d)(1)(i), permits are required to include limits for all pollutants "which the Director (defined as the Regional Administrator, State Director, or authorized representative in 40 CFR, Part 122.2) determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard."

A. Using the method described in the TSD, the Regional Board has conducted Reasonable Potential Analysis (RPA) for:

1. Chronic Toxicity - RPA was conducted for Chronic Toxicity (Table R2 of the accompanying Fact Sheet) using the discharger's effluent data from their ROWD and annual self monitoring reports. Chronic Toxicity effluent data is summarized in Table D2 of the accompanying Fact Sheet. The RPA compares the effluent data with USEPA's 1 TUc water quality criteria. The Discharger's effluent demonstrated Chronic Toxicity during the last permit cycle. Based on this information, the Regional Board has determined that there is a reasonable potential that the discharge will cause toxicity in the receiving water and, consistent with SIP section 4, the Order contains a narrative effluent limitation for Chronic Toxicity. The circumstances warranting a numeric Chronic Toxicity effluent limitation were reviewed by the State Water Resources Control Board (State Board) in SWRCB/OCC Files A-1496 & A-1496(a) [Los Coyotes/Long Beach WRP Petitions]. On September 16, 2003, the State Board adopted Order No. WQO 2003-0012, deferring the issue of numeric chronic toxicity effluent limitations until a subsequent phase of the SIP is adopted, and replaced the numeric chronic toxicity effluent limitation with a narrative effluent limitation for the time being.
2. Nitrate plus nitrite as nitrogen and other constituents with non-CTR based limits - RPA was conducted for Nitrate plus Nitrite as Nitrogen and other constituents (Table R2 of the accompanying Fact Sheet) using the Discharger's effluent data from their self monitoring reports. The effluent data for Non-priority pollutants is summarized in Table D2 of the accompanying Fact Sheet. The TSD RPA procedure compares the effluent data with the Basin Plan water quality objectives (WQOs) and other applicable criteria, and uses statistics to predict a receiving water concentration. Based on information submitted to the Regional Board by the Discharger, and using the TSD RPA procedure, the Regional Board has determined that there is a reasonable potential that the discharge will cause or contribute to an exceedance of the applicable criteria for: Nitrate plus Nitrite as Nitrogen, arsenic, bis(2-ethylhexyl)phthalate, total trihalomethanes and iron. Therefore, the Order contains numeric effluent limitations for Nitrate plus Nitrite as Nitrogen, arsenic, bis(2-ethylhexyl)phthalate, total trihalomethanes and iron.

B. Using the method described in the SIP, the Regional Board has conducted Reasonable Potential Analyses (RPA) for priority pollutants using the discharger's effluent data contained in Table D1 and receiving water data contained in Table D3. The RPA compares the effluent data with water quality objectives in the Basin Plan and CTR.

1. **Reasonable Potential Determination** - The RPA (per the SIP) involves identifying the observed maximum pollutant concentration in the effluent (MEC) for each constituent based on the effluent concentration data. There are three tiers to determining reasonable potential. If any of the following three tiers is

triggered, then reasonable potential exists:

- a. For the first tier, the MEC is compared with the lowest applicable Water Quality Objective (WQO), which has been adjusted for pH, hardness and translator data, if appropriate. If the MEC is greater than the (adjusted) WQO, then there is reasonable potential for the constituent to cause or contribute to an excursion above the WQO and a water quality-based effluent limitation (WQBEL) is required. However, if the pollutant was not detected in any of the effluent samples and all of the reported detection limits are greater than or equal to the WQO, proceed with Tier 2. The Regional Board exercised its discretion in identifying all available, valid, relevant, representative data and information in accordance with SIP Section 1.2 (page 5).
- b. For the second tier, the observed maximum ambient background concentration (B) for the pollutant is compared with the adjusted WQO. If B is greater than the adjusted WQO and the pollutant was present in the effluent, then a WQBEL is required, because the effluent has reasonable potential to contribute to an exceedance of the WQO. The Regional Board exercised its discretion in identifying all available, applicable ambient background data in accordance with SIP Section 1.4.3 (page 18).
- c. For the third tier, other information is used to determine RPA, such as the current CWA 303(d) List. Section 1.3 of the SIP describes the type of information that can be considered in Tier 3.

For all parameters that have reasonable potential to cause or contribute to an exceedance of a WQO/criteria, numeric WQBELs are required. Section 1.4, Step 5 of the SIP (page 10) states that MDELs shall be used for publicly-owned treatment works (POTWs) in place of average weekly limitations. WQBELs are based on CTR, USEPA water quality criteria, applicable TMDLs, and Basin Plan objectives (among which are MCLs included by reference).

If the data are unavailable or insufficient to conduct the RPA for the pollutant, or if all reported detection limits of the pollutant in the effluent are greater than or equal to the WQO, the Regional Board shall require additional monitoring, in accordance with Section 1.3. of the SIP. Upon completion of the required monitoring, the Regional Board shall use the gathered data to conduct RPA and determine if a WQBEL is required.

A numeric limit has not been prescribed for a toxic constituent if it has been determined that it has no reasonable potential to cause or contribute to excursions of water quality standards. However, if the constituent had a limit in the previous permit, and if none of the Antibacksliding exceptions apply, then

the limit will be retained. A narrative limit to comply with all water quality objectives is provided in *Standard Provisions* for the priority pollutants, which have no available numeric criteria.

2. **RPA Data** - The RPA was based on effluent monitoring data for June 2003 through May 2006. Data collected prior to June 2003 was excluded from the dataset, because it was not representative of the level of treatment provided by the upgraded treatment units at the Burbank WRP. However, since the priority pollutants were not sampled that frequently in the previous monitoring and reporting program, there was no priority pollutant data for June and July in 2003. Table R1 of the fact sheet summarizes the RPA, lists the constituents, and where available, the lowest, adjusted WQO, the MEC, the "Reasonable Potential" result, and the limits from the previous permit.
 - a. **Metals Water Quality Objective** - For metals, the lowest applicable Water Quality Objective (WQO) was expressed as total recoverable, and where applicable, adjusted for hardness. A spreadsheet (Table R3) was used to calculate the total recoverable CTR criteria. Hardness values from samples collected in the receiving water upstream of the discharge point are typically averaged and used to determine the appropriate CTR WQO for those hardness-dependent metals. However, since the hardness upstream was much higher than both the effluent hardness and the hardness downstream of the discharge, the downstream hardness was used instead of the upstream hardness, in order to protect the downstream beneficial uses. The average hardness values at (R2) were used to determine the appropriate CTR WQO for hardness-dependent metals. Individual hardness values greater than 400 mg/L were capped at 400 prior to calculating the average hardness of 224 mg/L. This is consistent with the preamble to the CTR, contained in Federal Register Section E.f. *Hardness* (p.31692), 40 CFR Part 131.
 - b. **Interim Monitoring Requirements** - In accordance with the SIP, the Regional Board may impose interim monitoring requirements upon the Discharger, so that the Discharger obtains adequate ambient, background water data for priority pollutants upstream of the discharge point as well as suitable effluent data. The Executive Officer directed the Discharger to begin an interim monitoring program for the duration of 18 months, beginning July 2001. The Discharger collected the eighteen required samples and reported the results quarterly to the Regional Board. The eighteen months worth of ambient (or receiving water) data were used in the RPA. However, since the effluent data was collected prior to the NDN upgrade, it was not representative of the current level of treatment provided by the Burbank WRP, and was not used in the RPA. After additional information is gathered, Regional Board staff will conduct another RPA, at a future date, to determine if additional numeric limitations are necessary. Section 1.3, Step 8, of the SIP authorizes the

Regional Board to use the gathered data to conduct RPA, as outlined in Steps 1 through 7, and determine if a water quality-based effluent limitation is required.

A reopener provision is included in this Order that allows the permit to be reopened to allow the inclusion of new numeric limitations for any constituent that exhibits reasonable potential to cause or contribute to exceedance of applicable water quality objectives.

For some priority pollutants, the applicable water quality objectives are below the levels that current technology can measure. Section 2.4.5 of the SIP discusses how compliance will be determined in those cases. The Discharger should work with the laboratory to lower detection levels to meet applicable and reliable detection limits; follow procedures set forth in 40 CFR, Part 136; and, report the status of their findings in the annual report. During the term of the permit, if and when monitoring with lowered detection limits shows any of the priority pollutants at levels exceeding the applicable WQOs, the Discharger will be required to initiate source identification and control for the particular pollutant. Appendix 4 of the SIP lists the minimum levels and laboratory techniques for each constituent.

- C. The numeric limitations contained in this Order are intended to protect and maintain existing and potential beneficial uses of the receiving waters. Environmental benefits provided by these limitations are reasonable and necessary.
 - D. Regional Board staff have determined that chromium VI, copper, mercury, selenium, zinc, dibromochloromethane, bichlorobromomethane, bis(2-ethylhexyl)phthalate, and lindane (gamma-BHC) showed the potential to exceed respective CTR objectives, and, therefore, require CTR-based effluent limitations. Regional Board staff have determined that the following pollutants showed the potential to exceed their respective Basin Plan WQO, and, therefore, require Basin Plan-based effluent limitations: arsenic, bis(2-ethylhexyl)phthalate, iron, and total trihalomethanes. The following have effluent limitations based on the waste load allocations prescribed in the *LA River Metals TMDL*: cadmium and lead.
53. The Order is consistent with State and Federal antidegradation policies in that it does not authorize a change in the quantity of wastewater discharged by the facility, nor does it authorize a change or relaxation in the manner or level of treatment. As a result, both the quantity and quality of the discharge are expected to remain the same consistent with antidegradation policies. The accompanying monitoring and reporting program requires continued data collection and if monitoring data show a reasonable potential for a constituent to cause or contribute to an exceedance of water quality standards, the permit will be reopened to incorporate appropriate WQBELs. Such an approach ensures that the discharge will adequately protect water quality standards for potential and existing uses and conforms with antidegradation policies and antibacksliding provisions.

54. ***Pollutant Minimization Program.*** This Order provides for the use of a Pollutant Minimization Program, developed in conformance with Section 2.4.5.1 of the SIP, when there is evidence that a priority pollutant is present in the Discharger's effluent above an effluent limitation.

INTERIM REQUIREMENTS

55. ***Chromium VI, Copper, Mercury, Selenium, Zinc, Dibromochloromethane, Dichlorobromomethane, Bis(2-ethylhexyl)phthalate and Lindane (gamma-BHC).*** Data submitted in previous self-monitoring reports indicated that these constituents have reasonable potential to exceed the CTR criteria and therefore require the limits prescribed in this Order. The Burbank WRP may not be able to achieve consistent compliance with the CTR-based final effluent limit for these constituents. The City has the option of conducting studies to obtain the necessary data to develop site-specific objectives (SSOs) for mercury, dibromochloromethane, and dichlorobromomethane for the protection of human health from the consumption of fish and shellfish taken from the receiving waters; or, an SSO for chromium VI, copper, or selenium, for the protection of aquatic life. However, the City should prepare and submit a draft workplan to the Regional Board for review and approval, prior to initiating the study.
56. 40 CFR, Section 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued, but the current Basin Plan only allows the inclusion of interim limits and compliance schedules in NPDES permits for effluent limits under special circumstances. The SIP allows inclusion of interim limits in NPDES permits for CTR-based priority pollutants, up to May 17, 2010. Therefore, this Order includes interim limits and compliance schedules for CTR-based priority pollutants limits for approximately four years, when the Discharger has been determined to have problems in meeting the new limits. This Order also includes a reopener to allow the Regional Board to grant TMDL-based compliance schedules if the USEPA approves the longer compliance schedule provisions of the SIP. For the non-CTR-based final effluent limit (for total trihalomethanes) prescribed in this Order, based on Basin Plan's WQO, for which the Discharger will not be able to meet immediately, an interim limits and compliance dates are provided in the NPDES permit, according to Resolution No. 2003-001, because the limit is based on a new criteria.

On January 30, 2003, the Regional Board adopted Resolution No. 2003-001, Resolution Amending the Water Quality Control Plan for the Los Angeles Region to Incorporate Language Authorizing Compliance Schedules in NPDES Permits, which allows compliance schedules in NPDES permits for effluent limits that implement new, revised or newly interpreted water quality standards, or for effluent limits that implement TMDLs for new, revised or newly interpreted water quality standards. The permit already contains an interim limit for the bis(2-ethylhexyl)phthalate CTR-based limit, so another interim limit for compliance with the Basin Plan-based effluent limit is not necessary. There is no need for an interim limit for iron, because the MEC was less than the final effluent limit.

57. The Discharger already has in place a source control and pollutant minimization approach through its existing pollutant minimization strategies and through the pretreatment program. The duration of interim requirements established in this Order was developed in coordination with Regional Board staff and the Discharger, and the proposed schedule is as short as practicable. The recommended compliance schedule is based on the maximum allowable compliance schedule.

CEQA AND NOTIFICATION

58. The action to adopt a NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code §21100, et. seq.) in accordance with California Water Code §13389.
59. The Regional Board has notified the Discharger and interested agencies and persons of its intent to renew waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.
60. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
61. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and is effective 50 days (December 29, 2006) from the date of its adoption because of significant public comment, in accordance with federal law, provided the Regional Administrator, USEPA has no objections.
62. Pursuant to California Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California, 95812, within 30 days of adoption of the Order.

IT IS HEREBY ORDERED that the City of Burbank, as owner and operator of the Burbank Water Reclamation Plant, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Effluent Limitations

1. Wastes discharged shall be limited to treated: municipal wastewater, and stormwater, only, as proposed in the ROWD. The discharge of process wastewater from the Burbank Steam Power Plant, into the Burbank Western Channel, is expressly prohibited.

2. The discharge of an effluent with constituents in excess of the following limits is prohibited:

(a) Conventional and nonconventional pollutants for Discharge Serial No. 002 for the Burbank WRP:

Constituent	Units	Discharge Limitations		
		Monthly Average ^[1]	Weekly Average ^[1]	Daily Maximum ^[2]
Settleable solids	ml/L	0.1	--	0.3
Suspended solids	mg/L	15	40	45
	lbs/day ^[3]	1,100	3,000	3,400
Oil and grease	mg/L	10	--	15
	lbs/day ^[3]	750	--	1,100
BOD _{5@20°C}	mg/L	20	30	45
	lbs/day ^[3]	1,500	2,300	3,400
Total residual chlorine	mg/L	--	--	0.1 ^[4]
Total dissolved solids	mg/L	950	--	--
	lbs/day ^[3]	71,000	--	--
Chloride	mg/L	190 ^[5]	--	--
	lbs/day ^[3]	14,000	--	--
Sulfate	mg/L	300	--	--
	lbs/day ^[3]	23,000	--	--
Detergents (as MBAS)	mg/L	0.5	--	--
	lbs/day ^[3]	40	--	--
Nitrate + Nitrite (as N)	mg/L	7.2 ^[6]	--	--
Nitrate (as N)	mg/L	7.2 ^[6]	--	--
Nitrite (as N)	mg/L	0.9 ^[6]	--	--
Total ammonia (as N)	mg/L	2.1 ^[6]	--	9.1 ^[6]
Iron	µg/L	300	--	--
	lbs/day	22	--	--

[1] The daily maximum effluent concentration limit shall apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring and Reporting Program (Attachment T).

[2] As defined in Standard Provisions, Attachment N.

[3] The mass emission rates are based on the existing plant design flow rate of 9 mgd, and are calculated as follows: Flow(MGD) x Concentration (mg/L) x 8.34 (conversion factor) = lbs/day. However, the design capacity will incrementally increase to 12.5 MGD, as the phased plant upgrade approaches completion. The mass-based effluent limitation will accordingly be modified upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.

[4] Determination of compliance with the final effluent limitation of 0.10 mg/L for total residual chlorine will be based solely on end of pipe grab samples.

- [5] In accordance with the Resolution 97-02, adopted by the Regional Board on January 27, 1997, the chloride limitation has been increased from 150 to 190 mg/L.
- [6] This is the waste load allocation (WLA), according to the *Nitrogen Compounds TMDL* Resolution No. 2003-009, adopted by the Regional Board on July 10, 2003. The WLA serves as the effluent limitation for the discharge. It became effective on March 23, 2004, after the USEPA approved the *Nitrogen Compounds TMDL*, and after the Regional Board filed the Notice of Decision with the California Resources Agency. The interim effluent limitations contained in the *Nitrogen Compounds TMDL* would not apply to the City's discharge, because construction and start-up operations of the NDN facilities have been completed.

(b) Toxic pollutants for Discharge Serial No. 002:

CTR # ^[1]	Constituent	Units	Discharge Limitations	
			Monthly Average ^[2]	Daily Maximum
	Arsenic	µg/L	10	--
		Lbs/day	0.75	--
4	Cadmium ^[3]	µg/L	4.4 ^[7 & 9]	5.8 ^[7 & 9]
		lbs/day	0.33 ^[7, 9 & 10]	0.44 ^[7, 9 & 10]
5b	Chromium VI ^[3]	µg/L	9.7 ^[6]	16 ^[6]
		lbs/day ^[4]	0.73 ^[6]	1.2 ^[6]
6	Copper ^[3]	µg/L	16 ^[6]	30 ^[6]
		lbs/day ^[4]	1.2 ^[6]	2.6 ^[6]
7	Lead ^[3]	µg/L	8 ^[7, 8 & 9]	13 ^[7, 8 & 9]
		lbs/day	0.6 ^[7, 8, 9 & 10]	0.98 ^[7, 8, 9 & 10]
8	Mercury ^[3]	µg/L	0.051 ^{[5], [6]}	0.10 ^{[5], [6]}
		lbs/day ^[4]	0.004 ^[6]	0.008 ^[6]
10	Selenium ^[3]	µg/L	4.2 ^[6]	7.8 ^[6]
		lbs/day ^[4]	0.32 ^[6]	0.59 ^[6]
13	Zinc ^[3]	µg/L	178 ^[6]	236 ^[6]
		lbs/day ^[4]	13 ^[6]	18 ^[6]
23	Dibromochloromethane	µg/L	34 ^[6]	45 ^[6]
		lbs/day ^[4]	2.6 ^[6]	3.4 ^[6]
27	Dichlorobromomethane	µg/L	46 ^[6]	61 ^[6]
		lbs/day ^[4]	3.5 ^[6]	4.6 ^[6]
68	Bis(2-ethylhexyl)phthalate	µg/L	4	17 ^[6]
		lbs/day ^[4]	0.3	1.3 ^[6]
105	Lindane (Gamma-BHC)	µg/L	0.063 ^[6]	0.13 ^[6]
		lbs/day ^[4]	0.0047 ^[6]	0.0098 ^[6]
	Total trihalomethanes ^[11]	µg/L	80	--
		lbs/day ^[4]	6	--

- [1] This number corresponds to the compound number found in Table 1 of CTR. It is simply the order in which the 126 priority pollutants were listed in 40 CFR section 131.38 (b)(1).

- [2] Compliance may be determined according to the requirements in Section IV.E.2 - Compliance Determination.
- [3] Concentration expressed as total recoverable.
- [4] The mass emission rates are based on the existing plant design flow rate of 9 mgd, and are calculated as follows: $\text{Flow(MGD)} \times \text{Concentration (mg/L)} \times 8.34 \text{ (conversion factor)} = \text{lbs/day}$. However, the design capacity will incrementally increase to 15 MGD, as the phased plant upgrade approaches completion. The mass-based effluent limitation will accordingly be modified upon certification and approval of increased treatment plant capacity. During wet-weather storm events in which the flow exceeds the design capacity, the mass discharge rate limitations shall not apply, and concentration limitations will provide the only applicable effluent limitations.
- [5] For priority pollutants, Section 2.4.5 of CTR *Compliance Determination*, reads, "Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported ML."
- [6] This effluent limitation will not be in effect until May 17, 2010, and until that time the Discharger shall comply with the applicable interim limits established in I.A.(9) below.
- [7] This is the **wet weather** waste load allocation (WLA), according to Resolution No. R05-006, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals for the Los Angeles River and its Tributaries (LA River Metals TMDL)*, adopted by the Regional Board on June 2, 2005. The Metals TMDL was approved by the State Board, with the adoption of Resolution No. 2005-0077. On December 9, 2005 and December 22, 2005, respectively, OAL and USEPA approved the *LA River Metals TMDL*. It went into effect on January 11, 2006. According to the LA River Metals TMDL, wet weather is "when the maximum daily flow in the River is equal to or greater than 500 cfs."
- [8] This is the **dry weather** waste load allocation (WLA), according to Resolution No. R05-006, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Total Maximum Daily Load for Metals for the Los Angeles River and its Tributaries (LA River Metals TMDL)*, adopted by the Regional Board on June 2, 2005. The Metals TMDL was approved by the State Board, with the adoption of Resolution No. 2005-0077. On December 9, 2005 and December 22, 2005, respectively, OAL and USEPA approved the *LA River Metals TMDL*. It went into effect on January 11, 2006. According to the LA River Metals TMDL, dry weather is "when the maximum daily flow in the River is less than 500 cfs."
- [9] This effluent limitation will not be in effect until January 11, 2011, five years after the Metals TMDL effective date, according to the LA River Metals TMDL Implementation Section.
- [10] According to the LA River Metals TMDL, the mass-based limits for Cadmium and Lead will not apply during wet weather.
- [11] Total trihalomethanes is the sum of concentrations of the trihalomethane compounds: bromodichloromethane, bromoform, chloroform, and dibromochloromethane. This limit is based on the Basin Plan WQO incorporation of MCLs by reference.

The following effluent limitations also apply to Discharge Serial No. 002:

- 3. The pH of wastes discharged shall at all times be within the range of 6.5 to 8.5.
- 4. The temperature of wastes discharged shall not exceed 86°F.
- 5. Pursuant to 40 CFR sections 133.102(a)(3) and 133.102(b)(3), the 30-day average percent removal by weight for BOD and total suspended solids shall not

be less than 85 percent. Percent removal is defined as a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations.

6. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions.
7. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which an analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.
8. For the protection of the potential water contact recreation beneficial use in the Burbank Western Channel and for the protection of the existing water contact recreation beneficial use in the Los Angeles River, the wastes discharged to water courses shall have received adequate treatment, so that the turbidity of the wastewater does not exceed: (a) a daily average of 2 Nephelometric turbidity units (NTUs); and (b) 5 NTUs more than 5 percent of the time (72 minutes) during any 24 hour period.
9. Interim Effluent Limitations
 - a. The Discharger shall comply immediately with the following interim effluent limit until May 17, 2010. Thereafter, the Discharger shall comply with the limitations specified in Section I.A.2.b. of this Order:

Constituent	Units	Monthly Average **
Bis(2-ethylhexyl)phthalate	µg/L	28
Copper	µg/L	64
Dibromochloromethane	µg/L	110
Dichlorobromomethane	µg/L	67
Mercury	µg/L	0.06
Selenium	µg/L	23
Gamma-BHC (Lindane)	µg/L	0.088

** The interim limit was set as the maximum effluent concentration

- b. The Discharger shall comply immediately with the following interim effluent limit until October 10, 2011. Thereafter, the Discharger shall comply with the limitations specified in Section I.A.2.b. of this Order:

Constituent	Units	Monthly Average **
Total Trihalomethanes	µg/L	228

** The interim limit was set as the maximum effluent concentration

- c. The Discharger shall submit quarterly progress reports (January 15, April 15, July 15 and October 15) to describe the progress of studies and/or actions undertaken to reduce the compounds in the effluent, and to achieve compliance with the limits in this Order by the above-mentioned deadline. The first progress report shall be received at the Regional board by April 15, 2007.
10. To protect underlying ground water basins, pollutants shall not be present in the wastes discharged at levels that pose a threat to ground water quality.
11. Acute Toxicity Limitation:
- a. The acute toxicity of the effluent shall be such that:
- (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and
- (ii) no single test producing less than 70% survival.
- b. If either of the above requirements (11.a.i or 11.a.ii) is not met, the Discharger shall conduct six additional tests over a six-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 3 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.
- c. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately

implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan.

- d. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (MRP) No. 4424.

12. Chronic Toxicity Limitation and Requirements:

- a. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

- b. Chronic toxicity of 100% effluent shall not exceed a monthly median trigger of 1.0 TU_c or a daily maximum trigger of 1.0 TU_c in a critical life stage test.
- c. If the chronic toxicity of the effluent exceeds the monthly median trigger of 1.0 TU_c , the Discharger shall immediately implement accelerated chronic toxicity testing according to MRP No. 4424, Section VI.4.B.d. If any three out of the initial test and the six accelerated tests results exceed 1.0 TU_c , the Discharger shall initiate a TIE and implement the Initial Investigation TRE Workplan, as specified in the following section of this Order (Section I.A.13).
- d. The Discharger shall conduct chronic toxicity monitoring as specified in MRP No. 4424.

13. Preparation of an Initial Investigation TRE Workplan

The Discharger shall submit a detailed copy of the Discharger's Initial Investigation TRE Workplan to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. The Discharger shall use EPA manual EPA/833B-99/002 (municipal) as guidance, or most current version. At a minimum, the TRE Work Plan must contain the provisions in Attachment C. This Workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum:

- i. A description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- ii. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in the operation of the facility; and,
- iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor). See MRP Section VI.4.D.a for guidance manuals.

B. Receiving Water Limitations for Surface Waters

1. For waters designated with a warm freshwater habitat (WARM) beneficial use, the temperature of the receiving water at any time or place and within any given 24-hour period shall not be altered by more than 5°F above the natural temperature (or above 70°F if the ambient receiving water temperature is less than 60°F) due to the discharge of effluent at the receiving water station located downstream of the discharge. Natural conditions shall be determined on a case-by-case basis.
2. The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of wastes discharged. Natural conditions shall be determined on a case-by-case basis.
3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.
4. The fecal coliform concentration in the receiving water shall not exceed the following, as a result of wastes discharged:
 - a. Geometric Mean Limits

- i. E.coli density shall not exceed 126/100 mL.
 - ii. Fecal coliform density shall not exceed 200/100 mL.
 - b. Single Sample Limits
 - i. E.coli density shall not exceed 235/100 mL.
 - ii. Fecal coliform density shall not exceed 400/100 mL.
- 5. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in natural turbidity attributable to controllable water quality factors shall not exceed the following limits, as a result of wastes discharged:
 - a. Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20%, and
 - b. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10%.
- 6. The wastes discharged shall not produce concentrations of toxic substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.
- 7. The wastes discharged shall not contain radionuclides in concentrations that are deleterious to human, plant, animal, or aquatic life, or that result in accumulation of radionuclides in the food web to an extent that present a hazard to human, plant, animal, or aquatic life.
- 8. The concentrations of toxic pollutants in the water column, sediments, or biota shall not adversely affect beneficial uses as a result of the wastes discharged.
- 9. The wastes discharged shall not contain substances that result in increases in BOD which adversely affect the beneficial uses of the receiving waters.
- 10. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
- 11. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
- 12. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.

13. The wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.
14. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.
15. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the receiving waters.
16. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life as a result of the wastes discharged.
17. Acute Toxicity Receiving Water Quality Objective
 - a. There shall be no acute toxicity in ambient waters as a result of wastes discharged.
 - b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
 - c. The acute toxicity of the receiving water, at the station located immediately downstream of the discharge, R-2, including mixing zone shall be such that: (i) the average survival in the undiluted receiving water for any three (3) consecutive 96-hour static, static-renewal*, or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.

* Static-renewal bioassay tests may be used, as allowed by the most current USEPA test method, for measuring acute toxicity.
18. Chronic Toxicity Receiving Water Quality Objective
 - a. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.
 - b. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
 - c. If the chronic toxicity of the receiving water, at the station located immediately downstream of the discharge, R-2, exceeds a monthly median of 1.0 TU_c in a critical life stage test and the toxicity cannot be attributed to upstream toxicity, as assessed by the Discharger, then the Discharger shall immediately implement an accelerated chronic toxicity